## Collecting Lepidoptera in Britain during 1974 By C. G. M. DE WORMS, M.A., Ph.D., F.R.E.S.\*

As in the two previous winters the new season opened with some very mild weather at the start of the year. In fact the daytime temperature during the whole of January was above 50°F. almost daily with as much as 57°F. on the 16th. Quite a number of the early species were already out when I visited Dr. Kettlewell at his home at Steeple Barton, near Banbury, on the 22nd. These included Phigalia pedaria Fab., Alsophila aescularia D. & S. and Theria rupicapraria D. & S. February too opened with a very mild spell and again the daily maximum kept well up in the 50's for most of the month. The first blooming of daffodils in Surrey on the 15th coincided with the appearance of Orthosia cruda D. & S. and some late Erannis leucophaearia D. & S. Orthosia stabilis D. & S. followed soon on 18th February with Achlya flavicornis L. on the 25th. In spite of a much cooler start to March Biston strataria Hufn. was out on the 1st which saw many sallows in full bloom. The 10th was the only occasion when much snow fell in the south-eastern areas. A visit to East Kent on 15th March did not yield anything of note, even in the Hamstreet Woods. During this part of the month several female Conistra rubiginea D. & S. came to light near Woking. Ova were obtained which produced some fine bred species in the late summer. On 29th March I motored to Exeter to attend an ornithological conference which took place in extremely sunny conditions with the thermometer in the 60's. The last day of the month saw quite a number of Peacocks flying in woods near Broadclyst. However, the New Forest on 1st April did not provide any of the hibernators, though Aglais urticae L. and Gonepteryx rhamni L. were flying round sallows on Horsell Common on the 2nd when the temperature was well above 60°F. I left for Jamaica on 6th April returning on the last day of that month.

The first ten days of May were relatively cool with the daily reading below 60°F. The first Pierids were observed on the 9th. A visit to Dorset the next day in the vicinity of Blandford took place on 10th May, but conditions were far from congenial and nothing of interest was noted in that region during the subsequent three days. A return to warmth started on the 14th with the temperature daily above 70°F. The Whites, especially Pieris napi L., were now out in full force accompanied by a good many Anthocharis cardamines L. The latter species was well in evidence when Mr. J. L. Messenger and I visited the Chidding-fold area on 9th May and were delighted to see Leptidea sinapis L. flying in considerable numbers, having made a remarkable come-back in that region. Pararge aegeria L. was well to the fore as also was Gonepteryx rhamni L. The first Clossiana euphrosyne L. were seen skimming over the low herbage on this very warm spring day and with them were also Coenonympha

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pamphilus L. and Pyrgus malvae L. males. The last ten days of May were distinctly cooler. Between the 24th and 29th I was in Northern France and Belgium. A visit to Alice Holt Forest on the 30th was most disappointing with only a few Pieris napi about. Searching and beating sallows did not yield anything of interest, except a few Orthosia and Citria larvae.

A very sunny but windy day ushered in the month of June. On the 1st I accompanied Mr. Russell Bretherton to Ranmore Common and the downs sloping southwards. We were extremely pleased to find Lysandra bellargus Rott. flying in fair numbers in both sexes as this species has been on the decline in many of its former haunts. Polyommatus icarus Rott. was also reasonably numerous as also was that very pretty little geometer Scopula ornata Scop. which was disturbed freely among the long grass. Also on the wing were the day-flying noctuids Euclidimera mi Clerck and Phytometra viridaria Clerck. The following day I joined Dr. John Holmes at Holybourne, near Alton. But the sky was very dull and mainly overcast when we surveyed some of the local downs and woodlands where my companion had seen Strymonidia w-album Knoch in greaty plenty two years earlier, but the beating of the local elms failed to dislodge any larvae of this little insect or any of Ptilophora plumigera D. & S. which occurs in this spot with its profusion of maples. Besides the usual Whites the only insect of interest was the Large Skipper at this early date. 4th June saw yet another very fine and warm day when I toured the area south of Chiddingfold, near Ebernoe, but beating of sallows yielded little of interest. However, L. sinapis was still plentiful in its haunts further to the north, while Pieris napi was abundant. I was once more in Kent on 8th June, but under much cooler conditions and little came to light in the Hamstreet woods on the evening of the 9th except Clostera curtula L., Lophopteryx capucina L., Diarsia festiva D. & S. and Anagoga pulveraria L. Even Hoads Wood earlier that day was most disappointing with only a few Whites flying and no larvae. The next few days were again warm and I saw a good many insects at m.v. light on the edge of Chobham Common on the night of the 12th. These included Pheosia gnoma Fab., Tethea ocularis L., Bena prasinana L., Drepana falcataria L., Lithacodia fasciana L., Electrophaës corylata Thunb., Plagodis dolabraria L., Semiothisa alternaria Hübn., Ectropis extersaria Hübn., Pseudoboarmia punctinalis Scop. and a female of Bupalus piniaria L.

Early on 14th June Mr. J. L. Messenger and I set out with the thermometer at 73°F. for the south-west, travelling via Andover and Mere to Honiton and Exeter and finishing up at Hope Cove, near Salcombe, where I was last in September 1970. We had not sampled this coast before in high summer. We were able to run our m.v. trap once more at the Cottage Hotel there and to very good advantage. A great concourse of insects visited it on our two nights with 190 individuals on each occasion and 56 species of macros on the first night and 49 species of macros on that of 15th June. We were especially pleased to

find in it several fine fresh examples of Hadena barrettii Doubleday on each occasion and a very dark Ammagrotis lucernea L. on the night of the 15th when we saw five species of the Sphingidae including Sphinx ligustri L., Laothoë populi L., Smerinthus ocellatus L., Deilephila elpenor L., and D. porcellus L. Among other species of note were Harpyia furcula Clerck, Cerura vinula L., Notodonta ziczac L., N. dromedarius L., two female Dasychira pudibunda L., Arctia villica L., Cycnia mendica Clerck, Apatele megacephala L., Hadena lepida Esp., H. rivularis Fab., H. bicruris Hufn., H. serena D. & S., H. conspersa D. & S., Ceramica pisi L., Leucania l-album L., Cucullia umbratica L., Caradrina ambigua D. & S., Plusia iota L., and Unca triplasia L. Among the geometers were Sterrha subsericeata Haworth, Scopula promutata Guen., Perizoma affinitata Stephens, Electrophaës corylata Thunb., Epirrhoë rivata Hübn., Eupithecia pulchellata Stephens, Lyncometra ocellata L., Gonodontis bidentata Clerck, and Cleora rhomboidaria D. & S.

Conditions were very warm on 15th June when we motored to Newton Ferrers, but apart from Pieris napi and Polymmatus icarus Rott. little of interest appeared to be on the wing. The following morning of the 16th we continued our journey westwards via Liskeard and Bodmin Moor where we were caught in a deluge. We reached the Mullion Cove Hotel late that afternoon and this was to be our headquarters for the next ten days. But the weather had changed for the worst and we had a very mixed stay in these delectable surroundings where we concentrated mainly on exploring the Lizard Peninsula. But we saw little of note there until 19th June when on our return from a day in Falmouth we halted on the Goonhilly downs which provided us with quite a lot of insects, notably a number of Clossiana selene D. & S. Quite a few Diacrisia sannio L. were also on the wing together with the Little Emerald Chlorissa viridata L. of which we obtained females which produced quite a lot of ova and subsequent larvae. One female Ortholitha umbrifera Prout was obtained and we saw a number of the Pyrale Hapalia olivalis D. & S. A visit to Kynance Cove on 20th June only provided again several C. selene.

The best day of our visit was 21st June when we travelled via Penzance to the southern coast, near Lands End, to explore one of the rugged coves in that vicinity, but in spite of a very fine and sunny day we only saw some of the regular insects such as P. icarus, Ochlodes venata Br. & Grey, while Maniola jurtina was just appearing. A visit on the 22nd to the eastern end of the Lizard at Porthoustock only yielded some more C. selene and larvae of Cucullia verbasci L. in plenty near the beach there. On 24th June we thought we would explore the area near the Loe Bar, just east of Porthleven. It was a dull and windy afternoon when we walked the mile along the rugged coastal road to the mouth of the Bar. Suddenly Mr. Messenger called out that he had taken an Atolmis rubricollis L. and within a few minutes the whole air seemed to be alive with this very attractive Footman careering about on the low cliff and

we even took two right on the seashore. This remarkable flight only seemed to last for about ten minutes and we were puzzled about the origin of this normally wood-loving species. We noticed some large fir trees bordering the Loe (Lake) and it is possible the trunks of these may have provided the lichens as pabulum for the larvae. We heard later that large numbers of these insects had been seen flying by day in another part of Cornwall, but not right on the coast. This phenomenon was indeed, as it were, a flash in the pan as a further visit to this spot the following day, admittedly in heavy rain, failed to reveal any more of this elusive species. We obtained a large batch of ova from one female. These duly hatched, but unfortunately the young larvae failed to feed up. This was our final episode during our time on the Lizard. During our stay at the Mullion Cove Hotel facilities were accorded us for running our m.v. trap on a lawn overlooking the steep cliff down to the cove, with very marked success. During nine nights we recorded almost 1,300 individuals (macros) comprising 95 species. Many of the species were similar to those we had seen at Hope Cove, but with a good many additions. Hawkmoths were well to the fore with plenty of Deilephila procellus L. and as many as 17 on the night of 22nd June. There was a fair number of D. elpenor L. and Smerinthus ocellata L. but only one Sphinx ligustri L. Arctia villica L. was another regular visitor with a single Diacrisia sannio L., also on the 22nd. Among the noctuids Hadena barrettii was almost a nightly arrival with some very fine fresh females. There was also quite a varied selection of *Hadena conspersa* D. & S. Only one Anaplectoides prasina D. & S. was recorded. Cucullia umbratica was to the fore again and the Plusias were well represented by P. iota L. and P. pulchrina Haworth, but a feature was the sudden influx of Plusia gamma L. with as many as 140 on 23rd June. Other probable migrants included several Peridroma porphyrea D. & S., and Agrotis ipsilon Hufn. Among the geometers, not seen in South Devon, were Lygris pyraliata D. & S., Perizoma alchemillata L., P. flavofasciata Tunb., Eupithecia castigata Hübn., and Perconia strigillaria Hübn.

On 25th June in very poor weather we left Mullion and travelled, via St. Austell and Lostwithiel, to a locality in the Tamar Valley area where Mellicta athalia Rott. had been plentiful but was virtually over at this early date. Conditions were very overcast with light rain and none of this charming butterfly was seen. We then went on via the western side of Dartmoor back to Hope Cove which was again our haven for two nights. They once more provided a concourse at the m.v. trap with 300 visitors and 56 species on the 26th. Most of the species were very much the same as we had seen two weeks earlier. Agrotis trux Hübn, was just appearing and quite a number was seen at light. H. barrettii reappeared as also did Leucania l-album, several very characteristic *Procus versicolor* Borkh. and *Semio*thisa alternaria Hübn. Cucullia umbratica was especially numerous. On 27th June we motored over to some rich ground north of Buckfastleigh where we happened to meet Capt. Peter

Gainsford, but conditions were too dull and cool for any profitable collecting there or later on on some bleak part of Dartmoor,

where nothing could be flushed from the deep heather.

We left South Devon on the morning of 28th June and halted for a short time in a lane just outside Kingsbridge. There was a lot of goosegrass there growing along the high hedge-row. Beating this herbage we flushed several Epirrhoë rivata Hübn. and Euphyia rubidata D. & S. We obtained quite a lot of ova from the latter species, but the young larvae failed to feed up. Late that evening we arrived back in Surrey after, on the whole,

quite a successful two weeks in the south west.

The following day I set out once again, this time to the New Forest. En route I stopped for an hour in Alice Holt Forest where little was on the move. I reached Sway in the afternoon to stay with Admiral Torlesse. In the early evening we surveyed a local heath where a small area was pink with the wild gladiolus, a remarkable sight, but little was flying till after dark when we set up our m.v. lights in part of Holmesley Enclosure. Insects began coming quite freely and by midnight we had recorded 33 species. The most interesting were three very fresh Moma alpium Osbeck. Other visitors included single examples of Hyloicus pinastri L., Deilephila elpenor L., Stauropus fagi L., Thyatira batis L., Craniophora ligustri D. & S., Drepana falcataria L., Polia nebulosa Hufn., and Laspeyria flexula D. & S. Among the geometers were Cosymbia linearia Hübn., Eupithecia pulchellata Stephens, Semiothisa alternaria Hübn., Plagodis dolabraria L., Ellopia fasciaria L., Ectropis extersaria Hübn., Campaea margaritata L., also Apoda avellana L. The final day of the month was somewhat dull, but it did not prevent a few of the first male Plebeius argus L. flying on the heath in Rhinefields Enclosure, but searching bog myrtle in that vicinity only yielded a single larva of Orthosia gracilis D. & S.

The second half of the year opened with some rather dull and windy conditions. Plebeius argus was well out in the Chobham Common area. On 3rd July, a much more favourable day, I revisited Alice Holt Forest to join a small party to survey some special parts of that area. Among those who attended were Dr. John Holmes of Bordon, Mr. and Mrs. Norman Riley of Wimbledon, together with Mr. Stearn and Mr. Waring of the Forestry Commission. The chief object of our attention was a little-known part of the forest called the Straights Enclosure, but little of note was on the wing except a few Maniola jurtina L., Pararge egeria L., Aphantopus hyperanthus L. and we saw a single Limenitis camilla L. Plebeius argus was again in good numbers near Chobham on 7th July. That evening I flew out to Greece with Mr. R. Bretherton returning on 25th July.

We were welcomed back with some very fine and warm weather with the thermometer in the 70's. A visit again to Alice Holt Forest on 30th July only provided a single female Thecla quercus L., while Maniola tithonus L. was far from numerous. Little too was to be seen when I surveyed the Petworth area on 1st August and it was disappointing not to see any Wood

Whites in the Chiddingfold region. On the 2nd I revisited Alice Holt Forest about midday in rather dull conditions. While walking up one of the rides I soon spotted a male Purple Emperor with its wings open at rest on the ground, but it was obviously somewhat damaged, so was released after capture. I then continued my journey to Portland where my haven was once more the Pennsylvania Castle Hotel where Mr. R. M. Craske was already staying. Only a number of Ouropteryx sambucaria L. were seen in the grounds that evening. The next day, 3rd August, broke fine and warm when Mr. Craske and I surveyed the island for its butterflies, mainly Lysandra coridon Poda. This species had already been out in this area for at least two weeks and was now at its zenith in the greatest profusio I have even seen it. Both sexes seemed to be in hundreds in a few special spots, mainly round some of the quarry workings. They were a sight to observe as the insects rested on grasses towards evening as many as 20 sometimes on a stem. Aberrations were not numerous in spite of this great concourse. However, we obtained a fine male of the form ultra-fowleri with all border lunules white instead of black, a most striking form. The local form of Eumenis semele L. also called for a good deal of attention, since this showed a remarkable degree of variation with some examples being devoid of some of the upperside spots, while others had extra spotting. They were very difficult to catch as they flitted about amongst the big and rough stones of the quarry areas. A deluge hit Portland on 4th August which made all collecting out of the question. However, the elements relented the next morning when we once more surveyed the various special localities for Blues. On this occasion the females of L. coridon seemed to be more plentiful, but no further major varieties were seen. There were quite a few second brood Cupido minimus Fuessly to be seen. The product of running our m.v. trap three nights at the hotel was somewhat disappointing for the time of year. The chief feature on the 4th was a big influx of some 50 Eilema lurideola Zink. The few other visitors of interest included Drepana binaria Hufn., Malacosoma neustria L., several Agrotis trux Hübn., Apamea sublustris Esp., Caradrina ambigua D. & S., Leucania conigera D. & S. and a few Plusia gamma L.

On my way back to Surrey on the afternoon of 5th August I called in at the Whiteparish woods south of Salisbury, but nothing was moving in spite of bright sunshine. There was some warm weather for most of the first part of August. On the 7th I went to Pewley Down on the outskirts of Guildford where a good many L. coridon were still flying. Again it had been relatively abundant in this inland locality. Zygaena filipendulae L. was also in fair numbers. But dull conditions supervened on the 10th and White Down, near Gomshall, yielded a blank that day. The temperature returned to the 70's by the 15th and remained about this range when I revisited the New Forest on 17th August to stay once more with Admiral Torlesse at Sway. Holmesley Enclosure was again our venue for night operations.

We sugared on posts along the road, but the only visitors were a few Amphipyra pyramidea L., a single Thyatira batis L. and a few Triphaena pronuba L. At our m.v. light we had several Lymantria monacha L., also Pterostoma palpina L., Euproctis similis L., Euschesis janthina L., Sterrha aversata L., Anaitis efformata Guen., and Semiothisa liturata Clerck. There was a fair concourse at my host's m.v. trap with a spate of Apamea secalis L. also Lampra fimbriata Schreber, Agrotis puta Hübn., Deuteronomos alniaria L., and a worn female Rheumaptera undulata L. The only butterflies on the wing in Rhinefields on the 18th were Maniola tithonus L. I went over again to White Down on 21st August and this time quite a number of L. coridon were still flying and still quite fresh, as also were females of Hesperia comma L. Polyommatus icarus Rott, was also on the wing there. The bright and warm weather continued well into the second half of the month, though it was less fine when I surveyed the downs north of Salisbury on the 23rd without much success. However, it was once more very sunny when I accompanied my relative over a hidden valley on the Dorset border, near Chesilbourne. Here I was pleased to see L. coridon again flying in plenty with a few Heodes phlaeas L., and P. icarus. But the next two days were dull and rainy with no collecting possible. An m.v. trap run two nights at Winterbourne Stickland where I was staying with my relative Major General W. Beddington, produced quite an assortment of species which included among some 250 visitors and 25 species Pheosia gnoma Fab., Eilema griseola Hübn., E. lurideola Zink., Agrotis ypsilon Hufn., Tholera cespitis D. & S., Procus furuncula D. & S., Diarsia rubi View., Leucania impura Hübn., Hydriomena furcata Thunb. and Deuteronomos fuscantaria Stephens, besides a host of T. pronuba. Leaving the Blandford area on 27th August I called in at Badbury Rings where the usual Pierids were flying, together with a number of Maniola jurtina L. and Coeno-nympha pamphilus L. After a visit to Mr. and Mrs. R. Hatton at Long Rowe, near Wimborne, where nothing was on the move. I went on to Mr. and Mrs. Dixon at Micheldever where their garden was fairly alive with P. rapae and P. napi, but no Vanessids were apparent, the feature of this late summer period. The thermometer touched the 70's during the last days of August and it was somewhat dull when I travelled to Folkestone on the 30th. However, on the last day of that month the sun shone continuously when I went over to Dungeness, but nothing was at rest on the famous railway posts nor did typha stems yield anything. But a few full-fed larvae of Calophasia lunula Hufn. were very apparent on yellow toadflax near the lighthouse. Since there was nothing flying there, I headed back eastwards to the downs above Folkestone where I was glad to find the second brood of Lysandra bellargus Rott. just starting to appear together with quite a few P. icarus.

I spent 1st September with Mr. Michael Tweedie and his family at their home just outside Rye, but in spite of fair conditions nothing of note was seen there. I returned to Surrey

the next day in a deluge. In fact the first week of this month was one of the stormiest for this period of the year that I could remember. The next ten days covering the middle of September were mild but with little sun. Whites were fairly prevalent, but there was a distinct lack of the Vanessids on buddleia and michaelmas daisies, with a great dearth of Red Admirals in the south-east. My next expedition took me on the 20th to the Cotswolds to stay with Mr. and Mrs. Ronald Demuth at there home near Sapperton. We went the next day on a tour to the Forest of Dean and then to the area of the Brecon Beacons returning via Chepstow and the Severn Bridge, but in spite of fairly fine conditions there was little to be seen on the wing except for a few Pierids. The 23rd was spent at the Wildfowl Trust where again I did not see any butterflies. During my three nights my host ran his m.v. trap which produced quite an assortment of the general run of common species which also included two Eremobia ochroleuca D. & S., several Aporophyla lutulenta D. & S., a lot of Amathes c-nigrum L. and Omphaloscelis lunosa Haworth and a single Larentia clavaria Haworth. I made my way back to Surrey on the 23rd in very wet and dull weather. This was the run of conditions for the last week of September which by no means lived up to its reputation as a second summer. And as it turned out October was on the whole equally unpropitious and very little profitable collecting was possible throughout the whole month. No long-distance expeditions were undertaken during this period which was for the most part very wet but fairly mild, though somewhat below average temperatures. It was virtually devoid of frosts in the south. Insects showed a great dearth during this autumn spell with hardly any butterflies seen and very few moths coming to light. There was little improvement during November, another mild but very wet month. On the 10th I accompanied Dr. John Holmes on a walk round part of Woolmer Forest, near Bordon in Hampshire. It was a very mild day for the time of year with the thermometer at 55°F., but in spite of the very pleasant conditions no lepidoptera were forthcoming either by day or on on a large bank of ivy in Dr. Holmes's garden, which we searched after dark. The middle of the month on 16th November I paid my customary autumn visit to Kent, but here again nothing was on the move either in the Dover or Folkestone areas. On the way home on the 19th I ran a Heath light for a short time on the downs near Dorking, but no Ptilophora plumigera D. & S. put in an appearance. The rest of November remained with very equable temperatures and no frosts with the result that many species started to emerge well before their normal dates. On 1st December several Erannis defoliaria L. were at rest after dark in the Virginia Water area together with plenty of Operophtera brumata L. The amazingly mild conditions persisted throughout the month and when it was as much as 60°F. on Boxing Day there was a phenomenal burst of precocious insects such as Phigalia pedaria Fab., Erannis leucophaearia D. & S. and Theria rupicapraria D. & S. in north-west Surrey.

So ended what is generally claimed to be one of the leanest years for the lepidoptera, certainly since the last War and possibly for this century. The usual common migrants were all extremely scarce, even the Silver-Y except perhaps in the south-west of England. The large migrant Sphingidae were likewise recorded in very small numbers with only a handful of the Bedstraw Hawk (H. gallii) after its invasion of 1973. Hardly was any species in the ascendancy except perhaps the Chalkhill and Small Blues which were in exceptional numbers in some localities. And above all the weather with a great deal of cold and rain in the summer did not help this very disappointing season of 1974.

## Notes and Observations

AMPHIPYRA PYRAMIDEA L. OR A. BERBERA RUNGS CLUSTER-ING UNDER BARK. — In early August 1965, when on an insect ecology course at Flatford Mill Field Centre, East Bergholt, Suffolk, I had an experience exactly parallel to that described by Mr. A. A. Allen (Ent. Rec., 87: 24-5). We were stripping samples of loose bark from dying elms to estimate the population of bark beetles by counting their galleries, when I got a surprise as a succession of nine copper underwings shot out from under one piece where they had been closely packed. Nobody else recounted a similar experience. As I am not a coleopterist I do not often peel off bark from standing timber and I dismissed the occurrence as memorable, but probably commonplace. It is therefore of interest that such a long-standing prober into obscure places as Mr. Allen should have only this one recent experience of an aggregation of Copper Underwings to recount.

I am led to conjecture how and why such an aggregation should build up. The moths have a long flight period: do they aestivate and only pair and become active in the autumn? In both our instances, it seems that the moths would have to leave their abode in a fairy definite sequence to avoid gross disturbance. Unless all the moths return nightly to the same roost, this suggests that voluntary activity is infrequent. — R. W. J. Uffen, 6 Staddles, Dell Lane, Little Hallingbury, Nr. Bishops Stortford, Herts., CM22 7SW, 30.vi.75.

Another New Forest M.V. Record. — The result of running my Robinson trap from dusk to dawn for the night of 1st-2nd June was — NIL. This is the first Nil return for a June night I have ever had. The maximum temperature on the 1st was 15°C., and for the night the minimum was 2°C. Records for previous years for the same date, giving the number of specimens (and the number of species), were: — 1963, 161 (47); 1964, 92 (41); 1965, 45 (21); 1966, 16 (8); 1967, 93 (35); 1968, 102 (38); 1969, 14 (9); 1970, 129 (43); 1971, 36 (24); 1972, 6 (5); 1973, 13 (9); 1974, 58 (23). — L. W. SIGGS, Sungate, Football Green, Minstead, Lyndhurst, Hants.